

CLAIMS:

1. A method of manufacturing a thermoset including the steps of adding expandable hollow microspheres to at least one of the base thermoset components in the liquid phase, and applying heat treatment to the partially or fully cured thermoset, causing the
5 expandable hollow microspheres to expand during, or after, curing of the thermoset.
2. A method as claimed in claim 1 wherein the thermoset comprises an epoxy resin and the expandable hollow microspheres are added to the epoxy component.
3. A method as claimed in claim 2 wherein the mixture of epoxy component and microspheres are heated for easy mixing before adding a curing agent.
- 10 4. A method as claimed in claim 3 wherein the mixture is allowed to cool before adding the curing agent.
5. A method as claimed in claim 3 wherein the mixture is stirred after adding the curing agent, and poured into a mould for curing.
6. A method as claimed in claim 1 wherein the expandable hollow microspheres consist
15 of a co-polymer shell and gas.
7. A method as claimed in claim 1 wherein the cured epoxy system is heated to create compressive residual stress around the expandable hollow microspheres.